

RK-304 / RK-306 Re-radiators for GNSS Signals

- ❑ The **RK-104** is for the American **GPS** signals, whereas the **RK-106** will re-radiate both **GPS** and the Russian **GLONASS** signals.
- ❑ The range of the internal radiating antenna is **30m**
- ❑ These systems re-transmit real time GNSS satellite outdoor reception to an indoor environment
- ❑ The system kit includes a high gain external antenna, a precisely calibrated amplifier circuit with Helix type re-radiator, and a mains power supply
- ❑ The Helix type re-radiator allows multiple GNSS receivers to perform within a closed environment, while the main antenna is located on an outdoor location
- ❑ The system is designed as Plug and Play hardware and it can be installed either temporarily or permanently to a secured location
- ❑ If installed in a lab, building, underground-garage or where ever, the system will re-radiate signals that meet your requirements



Specifications: RK-30x Re-radiators

Mechanical Data:

Dimensions:

Antenna	4.5" x 2.9" (Ø in inch x H)
Helix type re-radiator	37x35x71 (LxWxH mm)
Power-supply	65x32x43 (LxWxH mm)

Weight:

-Antenna	237g
-Helix type re-radiator	48g
-Power-supply	85g
Standard Mounting	Stainless bracket mount

Color:

- Antenna	White
-Helix type re-radiator	Black
-Regulator	Black
Construction:	Polycarbonate radome enclosure, sealed with waterproof rubber

Environmental Conditions:

Operating Temp.	-30°C ~ + 85°C
Storage Temp.	-40°C ~ + 90°C
Relative Humidity	95% non-condensing
Waterproof	IP65 rating

Antenna elements:

General L1 Frequency	1575.42 +/- 1.023 MHz
GLONASS (RK-306 only)	1602 +/- 8MHz
Gain	27 dB typically
Band width	2 MHz min
Noise figure	2.0 max
Polarization	R.H.C.P
Absolute Gain at Zenith	+5dBi typically
Gain at 10° Elevation	-5 dBi typically
Axial ratio	3 dB max.
Out of Band atten.	20dB min @FO+/- 50 Mhz
VSWR	2.0 max
Output Impedance	50 Ω

Cable & Connector:

Standard Connector:

-Antenna	TNC jack
-Re-radiator	SMA Jack
Cable	40m RG58 A/U

Electrical Specification:

Supply Voltage	100~240 V AC to 7.5V DC Regulator
Power Consumption	48 mA +/- 5% @ 7.5 V DC

Ordering Information:

RK-304 30m range for GPS only

RK-306 30m range for GPS *and* GLONASS

Related products:

RK-104 for GPS only

RK-106 for GPS *and* GLONASS

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